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THEORY OF GALL AND SPURZHEIM.

To the Editor of the Boston Medical and Surgical Journal.

SIR,—I am not alone in my disbelief of the doctrines of phrenology. John Mason Good, the most learned and ablest medical writer of the present century, in his Book of Nature, has preceded me in denying the truth of this system, otherwise I should not have ventured publicly to differ from you in regard to a theory which you appear to espouse. If I advance anything inconsistent with truth and reason, I hold myself subject to your correction.

Tycho Brahe was persuaded that he had not only demonstrated the absurdity of the Copernican theory of the planetary motions, but that he had settled the laws of the planets upon an immoveable basis. This nobleman mistook the earth for the largest planet in the system, and made it the immoveable centre about which all the others, and the sun among the rest, revolved. It appears to me that Gall and Spurzheim have committed a similar mistake. The Danish astronomer was probably as learned a man, as well acquainted with astronomical facts, and as earnest in the pursuit of truth, as Copernicus, but he was not so happy in the arrangement and classification of his ideas, and, therefore, instead of being conducted to the true solution of the motions and positions of the planets, fell into one of the most egregious errors. So it may be with Gall and Spurzheim. The credit of giving to the world a true solution of the motions and phenomena of mind, I cannot accord to them. Gall and Spurzheim appear to me to stand in the same relation to the metaphysical system of Locke and his disciples, as Tycho Brahe stood to the system of Copernicus; they have invented an ingenious and plausible theory to explain mental exercises and phenomena, the true solution of which had already been given. They do not appear to me to have been acquainted with the extent of the physical and mental history of man as it is known at the present day in Great Britain and America. They certainly betray very different ideas of demonstrative and scientific evidence from Newton, Locke, Harvey, Hunter and Jenner, or they never would have allowed themselves to call an aggregation of problematical positions, scientific principles. Hunter demonstrated the stomach to be the central governing organ of the animal system, a discovery which will doubtless stand the test of ages.

To show how slight a claim Dr. Spurzheim has to the title of a philosopher, I will quote a scientific definition from a manual published by him in Boston in 1834, entitled "Outlines of Phrenology." After saying that he admits four different temperaments as four degrees of activity in the mental powers, he thus defines the sanguine temperament. "The second, or sanguine temperament, is distinguishable by moderate plumpness of person and a tolerable firmness of flesh, light hair inclining to chesnut, blue eyes, fair complexion, great activity of the bloodvessels, easy perspiration and an animated countenance." It will be perceived, on the slightest reflection, that this definition does not indicate in the least, the temperament of an African, Asiatic, or an American Indian, although it is given as a scientific definition of the sanguine temperament of man in general. It indicates only the sanguine temperament of the white race; and it is evident from the three other definitions of the remaining temperaments, that the characteristics of the temperaments of the colored races of men never occurred to him. In a new system professing to be founded upon demonstrative evidence and the most extensive induction, and to supersede all other systems of mental philosophy, such an omission is rather ominous of other short-comings. Are the Africans, Asiatics and Indians all of one temperament? or are their different temperaments incapable of definition?

The fundamental principle of phrenology, is, that Size, all other conditions being equal, gives "energy of action" to the cerebral mass. Energy of action, as applied to mental exercises, is rather a vague and equivocal expression; it may very well denote the exertions of physical strength, but as the human brain may be full of energy, or the feeling of strength, and yet have no real capacity either for thinking or observing, the expression does not appear to me at all happy or appropriate. The train of ideas and feelings is the most active or energetic under the influence of passion, but passion is the bane to all useful exercises of the mind or cerebral mass. I shall employ the expression, however, as nearly as I can understand it in the sense of the author.

Does the condition of Size, *ceteris paribus*, give energy of action to the brain? The pulse of a child at birth is twice as quick as the pulse of a man at 35 years of age. The digestive function manifests the same energy; the muscular motions and the sensations betray the same rapidity; the lungs are no less active; all the phenomena of mind and body discover the same remarkable acceleration compared with the vital motions in after life, when the whole body, and each organ in particular, has acquired eight times the size of the same being at birth. The motions of the child which weighs eight pounds only, discovers just double the activity (the pulse being the true measure of the mental as well as the bodily motion) which is manifested when it is grown to the weight of a hundred and sixty-four pounds. Dr. Spurzheim would reply, that if the organs of the infant were still larger at birth, the activity of the mind and body would be still greater. But this would be begging the identical question at issue. It may appear very plain and reasonable that Size should give energy of function, just as it appeared plain and reasonable to Tycho Brahe that the earth stood still or only moved on its axis; but there is a wide difference between reasonable appearances and demonstrated truths. At the age of 21 all the vital motions, the train of ideas and sensations, the passions and emotions, love, joy, hope, fear, anger, sorrow, grief and disappointment, are all vastly more active and vivid than in after life, at the period of mature manhood, although the brain and the organs in general have not acquired near their full size. Love, especially, at the age of 35, when the brain is full grown, bears no proportion, in strength, to the same passion at 21; its activity has dissipated and its pleasures comparatively are weak and stale. Friendship, benevolence, reverence, the love of music and poetry; the fondness for colors, paintings and language; the pleasures of taste, smelling and feeling, are all proverbially less active and ardent at the age of 35 than at 21. At a little past mature manhood, while the size of all the organs is in its zenith, the keenness of sight begins to fail, the hearing grows dull, the feeling becomes more obtuse, the train of ideas less rapid, and all the vital motions sensibly slower. Whence this sudden decrease of energy of action in all the organs, while they yet remain unchanged in Size? Again, at the age of 85, for instance, the mental faculties, as well in large brains as in small ones, have all departed. The cerebral mass and all its structure are as entire as at the age of 35. The health is sound. The activity of the other organs, the digestive function, the lungs, the liver, the heart, the locomotive powers, is quite unimpaired. The temperament is unchanged. Age is the cause of nothing, it only indicates a series of vital or chemical changes in the system. Where, then, is the energy of action which characterized the cerebral mass at an earlier period of life? The brain is not dead, it is only changed in its constitution. A chemical change in the constituent particles of the optic nerve, called *amaurosis,* without the slightest alteration of Size, renders it insensible to the stimulus of light, and the power of vision is lost. A change in the arrangement of the constituent particles of the cornea, from being transparent, renders it opaque. We are told it is produced by disease, but disease only signifies chemical changes in the function or structure of the animal organs. But what becomes of the thirty-five primitive metaphysical faculties of Dr. Spurzheim in nearly all men who die of old age? In them the temperament and the size of the cerebral mass, the fundamental principle of energy of action according to Dr. Spurzheim, remains the same, while the mental faculties are nearly extinct. The changes which the cerebral mass has undergone are not discoverable by our senses, nor by any tests which we are at present able to apply. The mental faculties and exercises, then, depend upon certain qualities or conditions of the brain, independent of its size and temperament. This property or condition of the cerebral mass, probably, consists in the peculiar arrangement or combination of the material particles of which it is, for the time being, composed, like the transparency of the cornea or the sensibility of the optic nerve before the chemical changes take place which render the one opaque and the other insensible to the influence of light. Innumerable instances of such combinations may be noticed in the various departments of the material world. Iron loses its magnetic power without the slightest change in any of its known properties, whether of size or temper. Some bodies lose their electric power without any perceptible change in size, density or cohesiveness. Water, congealed into snow, becomes opaque; into ice, it is transparent.

The property of transparency in bodies is the reverse of the principle assumed by Dr. Spurzheim. The less the size or quantity of matter in a given surface, the greater the degree of transparency; the thinner a piece of glass or ice, is, the more light there is transmitted through it. The activity between light and transparent bodies, is increased in an inverse ratio of size. Previous to the knowledge of the evidence derived from observation and experiment, energy of action has no more connection with largeness than with smallness of size. The mental faculties may and probably do depend upon a property of the cerebral mass resembling that of transparency in bodies. It is evidently not the same property, but a property analogous to it. The mental faculties are produced and destroyed by chemical changes in the organ of the brain, without the remotest reference to its size or any other known property. In every period of life, infancy, manhood and old age, the cerebral mass undergoes changes, like the changes from transparency to opacity in the same mass of other matter, which destroy, increase or diminish the mental faculties. Neither size, therefore, nor temperament, can be admitted as fundamental conditions of the mental faculties, or of their energy of action.

Mr. Combe contends that the strength of the bones and muscles depends, *ceteris paribus*, on their size, and infers the greater strength of the cerebral mass from its analogy to these parts. There may be a certain degree of truth in this position, including the *et ceteras*, but when the *et ceteras* make the chief bulk of the account, they lessen materially the importance of the first item. I will not charge that gentleman and Dr. Spurzheim with a want of familiarity with the first principles of physical science, but they obviously avoid a special reference to all of them except the principle of size. In estimating the force of matter, density is a property or condition of matter equally as essential as size. The principles which constitute the force of bodies, are velocity, density and size, multiplied into each other. But these conditions do not constitute the strength of masses of matter. The fundamental principle of the strength of masses of matter, is a peculiar species of attraction, denominated, in physical science, the Attraction of Cohesion. Although the application of this principle to account for the strength of masses of animal matter in general, and of the animal organs in particular, may be new and peculiar to the writer of this paper, I trust that the intuitive evidence in favor of the proposition will insure it a ready approval. The principle of cohesive attraction has no necessary connection with quantity or size. In the same species of matter of the same weight, as in water congealed into ice, the power of cohesion varies immensely. A bone or a muscle of one inch in diameter, highly endowed with this principle of attraction, will manifest more strength than a bone or muscle of twice or three times this size, which is but slightly endowed with this property. A rod of iron of an inch in diameter, is a hundred times stronger than a hempen rope of the same size. The attraction between glue and wood is truly wonderful, and exhibits the force of this power in a palpable light; it furnishes, also, a specimen of cohesive attraction, as being the fundamental condition of the strength of animal matter. The strength of a bone or muscle, then, is compounded of three conditions—cohesive attraction, density, and size; but all these principles do not constitute force or energy, in the sense in which Dr. Spurzheim uses the term. Motion or impulse must still be added. The force or energy with which the heart beats or propels the blood, for instance, consists of the velocity of its motion, the density and size of its walls, and its degree of cohesiveness. In estimating the force of action of the muscles even, this definition of the energy of action of an organ, reduces the relative importance of the single condition of size to quite a secondary consideration. In determining the energy of the cerebral mass, the properties of cohesiveness and density must be considered of at least equal importance with size, although phrenologists furnish us with no means of ascertaining the degree of either. A great degree of cohesiveness and density added to a small brain, may give it a much greater degree of energy than a large brain possesses, which is comparatively unendowed with the other principles. I do not even profess to know that cohesiveness and density are cardinal conditions of the brain; I only reason upon the principles of phrenologists, which are borrowed from the analogy which the other parts of the system bear to the cerebral mass.

With your permission, I will finish the discussion of this subject in another paper. D. B. Slack.

Providence, R. I., Jan. 23d, 1844.

ULCERATION OF THE SUBMAXILLARY GLAND—GANGRENE—DEATH.

[Communicated for the Boston Medical and Surgical Journal.]

Mr. C. C., aged about 25 years, of sanguine temperament, muscular and plethoric, of intemperate habits, called on the writer July 19th, with a swelling of the left side of the face, particularly about the angle of the lower jaw. It presented a smooth, shining surface, with hardness, though no tenderness on pressure—no pain or discoloration. He complained that a tooth had troubled him, and on examination the dens sapientiæ of that side was found to be carious, and was extracted with some difficulty. Noticed that his breath had the mercurial fetor.

20th.—Was called to visit him. Found the swelling increased. It had extended to, and nearly closed the eye on the affected side; pulse small, feeble, compressible, and 120, though no pain or tenderness on pressure; no inordinate heat in the part; mercurial odor increased.

21st.—Tumor more tense; constitutional irritation greater; pulse 125;

symptoms of delirium tremens. Had commenced discharging purulent matter, in great quantities, from the mouth.

22d.—Had slept some; tendency to delirium tremens abated. On examination, found that a softening and fluctuation had taken place under the chin. Made a free incision, which gave exit to a great quantity of ill-conditioned and most offensive pus. Discharge from the mouth continues.

23d.—Swelling somewhat diminished; purulent sputa and discharge from the external opening continue. Integuments had sloughed off around the incision to about an inch in diameter; pulse 130; stench intolerable, combining the disagreeable fetor of mercurial disease with that of gangrene.

24th.—Sloughing had extended, making an oval opening under the chin, measuring two and a half inches in its longest diameter. Profuse hemorrhage had taken place externally at the opening, and internally through the duct of the submaxillary gland.

25th.—Hemorrhage had returned, and continued until syncope came on. Gangrene had extended along the cellular substance and integuments to the clavicle on each side.

26th.—Symptoms nearly as yesterday; had lost some blood during the night. Hemorrhage returned the next evening, with such profuseness as to end his sufferings.

This case was treated at first with saline cathartics and opium to allay nervous excitement and procure rest; together with terebinthinate gargles and liniments, topically. When the tendency to gangrene manifested itself, sul. quinine, sul. acid, with brandy and opium, were freely administered. After hemorrhage supervened, the most powerful styptics were locally applied, and with a syringe thrown through the submaxillary duct. Privilege of *post-mortem* examination not obtained.

A few days before his illness, the patient had shaved off a huge pair of *mustaches*, and some time previously had obtained medicine of a druggist in the neighborhood, for venereal disease.

The following view of the case presents itself. That the patient was under the influence of mercury (a circumstance carefully concealed from the writer, notwithstanding his interrogations), and that on denuding the face of its customary protection, a cold was taken, causing tumefaction of the submaxillary gland with full development of intense mercurial disease. Ulceration taking place in the gland and involving its whole substance, the matter at length found its way into the surrounding cellular substance, destroying its texture as it proceeded, until it reached the most depending part, where from its accumulation sloughing of the integuments took place—a result which we never expect from a collection of healthy pus.

Query.—Is the peculiar fetor which always attends a mercurial ptyalism, ever caused by any disease not having a mercurial origin?

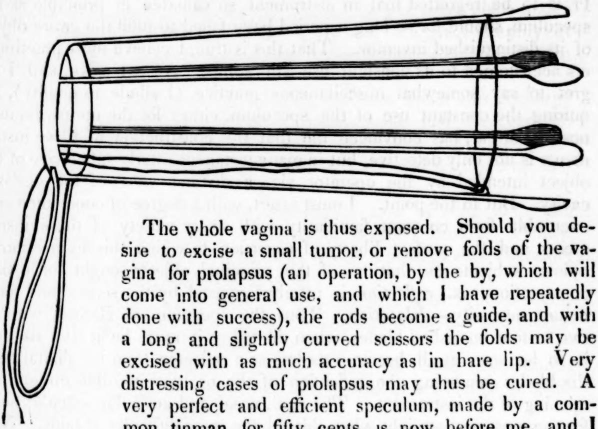
Chester, N. H., Jan. 15th, 1844. WM. W. BROWN.

DR. DIXON'S NEW SPECULUM.

[Communicated for the Boston Medical and Surgical Journal.]

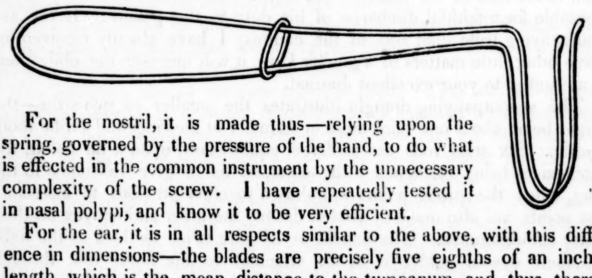
It is to be regretted that an instrument so valuable in principle as the speculum, should for so long a period have failed to fulfil the entire object of its distinguished inventor. That this is true, I believe most practitioners accustomed to its constant use will admit. An extensive, and, I regret to say, somewhat miscellaneous practice (I allude to quality), requiring the constant use of the speculum, either for the uterus, rectum, nostrils, or ear, has convinced me that the construction of these instruments is not only defective, but in many instances utterly subversive of the object intended by the operator, viz., a distinct view of the diseased cavity. But to the point. I must assert, with a degree of confidence only excusable from constant familiarity with every variety of these instruments, and the perfect liberty of aspersion to which this expression of opinion subjects me, that one of the principal objects sought for in their construction, viz., *reflection*, is utterly thwarted by the second and paramount necessity—*dilatation*. Thus the speculum of Ricord, with its two or four burnished blades, when dilated as it must be if the os uteri is to be seen at all, becomes useless as a reflector, from the dilatation of the blades rendering the reflection of the os uteri invisible through the opening of the instrument. The anal, nasal and auricular specula, being for the most part straight when dilated, the same difficulty obtains. Now the question is—and it can only be referred to practical men—is the reflection of any consequence whatever? I think a negative answer will be given; and if so, whence arises the necessity for their massive and expensive structure, from the ear speculum of $3, to the uterine of 10 to $16, which is a considerable tax to the physician, and sends many a man to the field of his labors without the instruments absolutely indispensable for a faithful discharge of his duty to the patient. If the accompanying trifle shall add to the courtesy I have already received for some other little matters of a similar kind, it will increase the obligations I am under to your excellent Journal.

The accompanying draught illustrates the smaller of two sizes—the larger being about one third more in diameter at the ring, and a trifle more flaring. Six steel rods are soldered, equi-distant, upon a tin collar, the interspaces being thickened with solder, so as to give resistance to the ring, when the probe points are drawn together previous to insertion; the points are also made of solder, flat on the inner and convex on their outer circumference. The handle is of wire twice as thick as the rods. A small eye of solder is to be attached to the *lower* rod, through which a strong cord of six strands of silk is to be reeved, *thus*—five of the rods being encircled by the cord, each end of it is to be passed through the eye, one to the right, the other to the left hand, and then both are to brought through the ring or mouth of the speculum. Pulling on the ends of the cord will close the probe points, the eye being the fulcrum. When closed, wind the cord round the handle, and introduce the instrument at your leisure, instructing the patient to be calm and avoid resistance. Then unwind the cord, and you have perfect command over the points, and can allow them to expand as slowly as you wish.



The whole vagina is thus exposed. Should you desire to excise a small tumor, or remove folds of the vagina for prolapsus (an operation, by the by, which will come into general use, and which I have repeatedly done with success), the rods become a guide, and with a long and slightly curved scissors the folds may be excised with as much accuracy as in hare lip. Very distressing cases of prolapsus may thus be cured. A very perfect and efficient speculum, made by a common tinman for fifty cents, is now before me, and I really cannot conceive why the instrument should ever cost more.

For the rectum, the instrument is made of one inch in diameter at the collar, and expands to one and a half; it is four inches in length, and requires no stouter wire, as the decrease of length gives the same wire more power; it has but four rods.



For the nostril, it is made thus—relying upon the spring, governed by the pressure of the hand, to do what is effected in the common instrument by the unnecessary complexity of the screw. I have repeatedly tested it in nasal polypi, and know it to be very efficient.

For the ear, it is in all respects similar to the above, with this difference in dimensions—the blades are precisely five eighths of an inch in length, which is the mean distance to the tympanum, and thus there is less danger of injuring that delicate membrane. Their breadth is precisely three eighths of an inch. Should the surgeon desire to manipulate at leisure, and to avoid indefinite distension, the ear speculum may be governed by a sliding ring as above. In the construction of these smaller instruments, the surgical mechanic will probably be found necessary, as the steel wire which is indispensable requires bending and re-tempering.

New York, January, 1844. E. H. Dixon.

POISONING BY OXALIC ACID.

(Read before the Boston Society for Medical Improvement, in 1834, and communicated for the Boston Medical and Surgical Journal.)

D. McG., an Irishman, about 30 years old; keeps a stall in the market place; manufactures suspenders. About a year since, he purchased in New York a quantity of oxalic acid for the purpose of cleaning corroded brass buckles, which he uses in making suspenders. During a late sickness in his family he purchased a quarter of a pound of Epsom salts, a considerable portion of which remained in the house, and was kept in the same place with the oxalic acid, and in a similar colored paper.

Feb. 1st.—At half past 8 o'clock, A. M., he proposed taking a dose of salts, and by mistake took the oxalic acid. Having measured out about one third of a teacupful of the crystallized oxalic acid, he poured upon it sufficient warm water to fill the cup, and placed it on the stove to dissolve, stirring it occasionally. He remarked that his salts did not all dissolve, and then drank the solution at a single draught. He immediately perceived by the strong acid taste, burning sensation in the throat, and "a gathering at stomach," that he had made a mistake, and thrust a leather strap into the fauces to provoke vomiting. He also drank warm water for the same purpose. Vomiting took place, and the acid thrown up was so strong as to change the black color of his vest to a red brown when it flowed upon it. One of his friends in the mean time ran into a neighboring apothecary's shop, with the undissolved acid remaining in the cup, and was told that it was a deadly poison. He then called upon a physician, who ordered an emetic of ipecacuanha to be given, and shortly after visited the patient.

I was called in and desired to take charge of the patient at 8½, P. M. I found there an irregular practitioner, who had given him an additional emetic of tart. antimony, and followed it by a dose of castor oil. Vomited "drops of blood." When I saw the patient he was in a state of complete prostration; face, lips, throat and tongue swollen and livid; pulse almost extinct, but could be felt by a delicate touch, and was found to be exceedingly weak, rapid, and so irregular that it could not be counted. Heart in a continual fluttering palpitation; great jactitation and distress, with incessant vomiting. The matter evacuated by vomiting was a thick grumous and jelly-like fluid, of a yellow color, mixed with white flocculi. Does not complain of pain, even when deep pressure is made over the stomach and bowels, but is in the greatest distress and anxiety. I learned that the first spontaneous vomiting, and that produced by the action of the ipecac., brought up a quantity of dark-brown matter, like chocolate. This had been thrown away, so that I could not see it myself. I found a person giving him a little white mixture, which appeared to be a mixture of chalk and water, but as the quantity was insufficient to produce the desired effect, I directed him to give calcis carbonatis, ʒ iij., mixed with camphor and opium, grs. v. This was given in divided doses, but was not retained long in the stomach. I also directed him to give an injection of soap and water to evacuate the bowels.

Feb. 2d, 9½, A. M.—He has vomited continually in night a yellow thick fluid. Tongue livid, and swollen so that he can with difficulty project the tip of it beyond the teeth; face tumid, and of a livid complexion; pulse 130, very small and thread-like; urine suppressed entirely; no evacuation from enema—gave him infusion of senna, ℥vi.; sulph. magnesia, ℥j.; carb. magnesia, ʒij. M. To be given in divided doses.

10, P.M.—Has taken the cathartic as directed, but vomited it immediately; no dejection; urine still suppressed.

3d, 9, A. M.—Vomiting has continued incessantly; distress continues; pulse 130; tongue and face still swollen and livid.

6, P. M.—Applied four leeches to epigastrium; they took hold and filled well, and did *not die.* Gave him a copious enema of soap and water, which operated effectually on the bowels, and brought away solid and liquid fæcal matter.

11, P. M.—Still vomiting a grass-green fluid, with a mucous sediment and white flocculi; great distress and fear of death. Directed him to take sulphate of morphia, gr. ij.; aquæ, ℥ij., M., in doses of a teaspoonful after each vomiting.

4th.—Vomiting diminished in frequency, but the matter is still of the same character; pulse 132, fuller and hard; tongue has a thin brown coat, and red, dry tip; very thirsty; no pain, but still distressed and anxious. Bled him nine ounces, and took the blood home to examine; applied a blister to epigastrium; increased the strength of the solution of morphia to grs. iij. to water ℥ij. I now endeavored to learn from him and his friends exactly how much oxalic acid he had taken, and caused him to measure out several times in the cup the bulk of his dose. This he did with great exactness, and from his friends I learned how much remained undissolved in the cup. I took the quantity equal to his dose home with me to weigh, and found it to be 535 grains. I then placed it in a cup of the same capacity as that he had used, and filled it up with five ounces of water at 95 deg. F., and found that the portion undissolved was equal to that said to have been left in his cup, and weighed 58 grains; so that 477 grains were dissolved, which was the quantity taken by the patient. It appears, then, that he took nearly an ounce of oxalic acid!

On the 5th of February I found him with a full, hard and intermittent pulse of 122. Tongue covered with a brown coat, red at the tip, and dry. He is very thirsty; passed urine twice in night; vomits still yellow fluid. Bled him ℥xij., and directed him to continue the sulphate of morphia.

10, P. M.—Vomits less, is disposed to sleep.

6th.—Pulse 100, full, but not hard; vomits less; is delirious at times; tongue covered with a bright-yellow coat; passes urine; skin of face, head, chest and nates, covered with red spots or petechiæ, appearing as if bespattered with blood.

7th.—Pulse 104, hard; tongue covered with brown coat, tip red and dry; no pain, but still distressed; vomits less frequently. Matter thrown up grass green, with grumous sediment; face, chest, &c., still covered with red spots; feels a sinking sensation at stomach. Continue the morphia when vomiting is urgent. He may have a little toast water, about a teaspoonful at a time

8th.—Face is sunken; expression anxious; pulse 100; tongue brown; delirious at times; vomiting diminished in frequency. Ordered him a little rice water, to be taken in small quantity at a time. Gave him an injection of oat-meal gruel.

9th.—Face Hippocratic; eyes sunken; delirium; pulse 100; tongue dry, has brown coat, and red, dry tip. Has taken three cups of arrow root. Urine passed in small quantity; distress and anxiety; no pain on pressure at epigastrium and abdomen.

10th.—Face Hippocratic; pulse almost insensible to touch, very weak; delirium and stupor; bladder distended with urine, but cannot pass; does not vomit, although he has desire to do so. He is evidently sinking.

6, P. M.—Drew off the urine by catheter. Sunk rapidly, and died at 9, P. M., without a struggle.

Post-mortem Examination, 10½, A. M.—Muscles rigidly contracted; numerous petechiæ on face, chest, arms and nates. Lungs free from tubercles. Emphysema of lower lobe of left lung. Crepitate under pressure. Unusual infiltration of serum in lungs. Otherwise they appear healthy. Heart does not contain blood in left ventricle and auricle, and but little in the right side of the organ. Usual quantity of liquor pericardii, about half an ounce. Liver very blue where in contact with the stomach; otherwise appears sound. Gall-bladder very much distended with yellow bile. Stomach contains a yellow fluid, evidently colored with bile. Stomach remarkably corrugated. Mucous membrane very bright red, especially in small curvature of the organ and around the cardiac orifice. Numerous small ulcers in the mucous membrane, which is thickened and soft. Strips one third of an inch in length may be struck off by scalpel, but they cannot be torn up by the fingers when the membrane is raised. Duodenum—mucous membrane red, thickened, and has small ulcers in it. Jejunum and ileum congested with blood. Peyer's glands not enlarged. Small intestines contain soft, yellow, fluid, fæcal matter. Large intestines—colon and cæcum contain scibalæ of fæcal matter; mucous membrane in its healthy state. Spleen natural. Bladder contains urine, but is not distended more than usual.

Took the stomach home for further examination. I found the mucous membrane very much thickened, having numerous small ulcerations, and yellow stripes which were not capable of being removed by maceration in water. Corrugation of the mucous membrane very distinctly marked. The red color of the mucous membrane remained after maceration in cold water for ten days. C. T. Jackson, M.D.

CASES OF HYSTERIA.

[The following singular cases are related in the London Medical Gazette, by Dr. Edward Greenhow.]

Although several years have elapsed since the following cases occurred, their interest is by no means diminished in consequence, and I think they merit a more prominent record than the pages of my case-book are calculated to afford them, independent of the practical hint they convey.

It was on the 4th of August I was consulted by a respectable chain-cable manufacturer, who I found had been suffering from the first of the month from incessant hiccup. He was a thin, delicate man, of a sanguine temperament, and I found had sustained a severe pecuniary loss on the 1st of August, when, to use his own language, he felt a choking as if a ball was rising in his throat, and shortly afterwards the hiccup commenced, and which only ceased when from sheer exhaustion he dropped asleep, to be awoke shortly by a renewal of the hiccup. The complaint had continued now for the greater part of four days, without any amendment. It is unnecessary to detail the treatment, which proved wholly unavailing; suffice it to say, he took largely of the carbonate of magnesia, and also of valerian, camphor and assafœtida. Opiates were also used without the slightest benefit, and the case went on until the 8th of August, on which day he remained in the same state, but his wife also had begun to hiccup, accompanied with globus hystericus, and on the day following his sister had also commenced, and on the succeeding day, that is on the 10th, the maid-servant had got into the same state. It was a painful spectacle, although somewhat a ludicrous one, to see four individuals all at the same time hiccuping. It is the most extraordinary instance of imitative hysteria I ever witnessed; but what was worse, the remedies I have enumerated had no effect in controlling the disease. However, on the 11th, something which the maid-servant took made her vomit, and from that moment the complaint ceased. I immediately ordered each of the others a mustard emetic, and was rejoiced to find that the sister also was cured after free vomiting: the wife did not so soon get rid of her attack, which, however, ceased for some time after the operation of the emetic, and she was now able to take her food, and a repetition of the emetic at the end of a few hours, and a warm stomachic with some of the carb. magnes., removed her complaint. Not so the husband, whose attack, however, was always suspended by vomiting, but soon returned. Now, however, he slept for considerably longer periods, and the complaint was suspended while he was eating; he was put upon a similar plan as his wife, only the emetic was used every evening. Under this treatment he got gradually well, but it was full three weeks before he was entirely rid of the hiccup.

I do not recollect having seen any similar instances recorded, although no doubt similar instances have occurred; it had the effect, however, of giving me a lesson in the treatment of hysteria, which I have never had cause to regret, having always found vomiting put a period to the attacks, and the moral effect upon the patient is equally satisfactory, as I believe the dread of an emetic has often had the effect of a check to a hysterical attack.

SYNCOPE FROM THE ADMISSION OF AIR INTO A VEIN.

[At a late meeting of the Medical and Chirurgical Society, in London, Bransby B. Cooper, Esq., related the following case.]

The patient, a female, 19 years of age, was admitted on the 17th of May, 1843, under the care of the author, for enlargement of the middle third of the humerus. She had suffered pain in the seat of the disease for eight months, but the swelling did not commence till six weeks before her admission into the hospital. From the history and the examination of the arm, the tumor was considered to be a malignant disease of the bone, and amputation at the shoulder-joint was resolved upon. This operation was performed on the 23d of May. The arm was removed in less than a minute, and with very little loss of blood. When the limb had been severed from the body, the patient, who had borne the operation with great fortitude, expressed her thankfulness in a firm and audible voice. The subclavian artery was immediately secured, but its compression still retained upon the first rib, as there were small vessels requiring ligature. The author then proceeded to remove a gland, which was somewhat enlarged, from the axilla; and while dissecting it from its cellular attachments, he distinctly heard a peculiar gurgling noise, like air escaping with fluid from a narrow-necked bottle; and at the same instant the patient fell into a state of collapse, threatening immediate dissolution: the countenance was deadly pale; pupils fixed, and unobedient to light; the pulse quick, small, and fluttering, although at intervals regular; the respiration was irregular, being hurried and feeble, and attended occasionally with a deep sigh. The patient was directly placed in the horizontal posture, the flap brought over the wound and retained by plaister; and various stimulants were administered. An hour elapsed before she was sufficiently recovered to be removed from the operating theatre. Upon being placed in bed, she passed her fæces and urine involuntarily. When the re-action was coming on, she uttered a continued whining cry, and maintained a constant motion of alternate flexion and extension of the right leg, while the left remained perfectly quiescent, and seemed insensible to feeling, as well as motionless. She complained also of pain running up the right side of the head and neck. For several days she remained with her eyes closed. The lower extremities in the same condition as described, and the pulse very frequent. It was found necessary to give her opiates at different times, which relieved her general restlessness, and procured sleep. On the fourth day, the left leg was also affected with involuntary contractions; but these subsided on the following day. On the 25th day she was able to leave her bed. The motions of the right leg had ceased at this time, but she complained of great numbness and loss of power in the left leg. On the 3d of July she was sufficiently recovered to leave the hospital, having no other unfavorable symptom than a slight dragging of the left leg. The author concluded his paper by adding remarks on the consequences of air being admitted into the veins, and pointed out the resemblance between the symptoms in his case and those presented in other similar cases upon record, as well as in experiments upon the lower animals, made to elucidate the subject. He drew attention to the different effect produced in man compared with brutes by the admission of air, owing to the influence of mental agitation on the motions of the heart in the former. He also dwelt on the various modes of death in such cases, according as the air introduced distended and paralyzed the walls of the right cavities of the heart, or was sent onwards, mixed with the blood, to the lungs, or was transmitted by the arteries to the brain; and he ended by offering some practical remarks on the best mode of guarding patients from such dangerous occurrences in operations about the neck and shoulder.

THE BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON, FEBRUARY 7, 1844.

*Theory of the Nervous System.**—So mysterious are the phenomena of life, that men in every age have ardently attempted to investigate and explain them, though they are still but poorly understood. Anatomical explanations present us with a vast variety of beautifully constructed apparatus, all concurring, harmoniously, in the production of results, the most extraordinary to the mind of a philosopher. Without muscles, vessels, nerves and a circulation, there is no vitality. Such is the interest in regard to this great question, what is life? that no sooner does one writer step aside, than another promptly announces himself with new tidings of essential import. Such inquiries give exercise to the highest order of minds, since those of ordinary calibre seldom attempt to cope with subjects which are so much beyond their reach.

From the press of the great medical publishing house of Messrs. Lea & Blanchard, of Philadelphia, we have been favored with a scientific essay, that appears destined to excite no little degree of movement among the dry bones of every-day, stereotype thinkers. It is an attempt to produce a correct theory on the nervous system, by Dr. Harrison, professor of physiology, &c. in the Medical College of Ohio. Whether he succeeds, or not, in the undertaking, in a satisfactory manner, Dr. Harrison's claims to the distinction of a close student and a powerful reasoner, cannot be called in question, with any show of reason.

"It will be observed," says the author, "that this work is entitled an essay. It is indeed an attempt—perhaps an unsuccessful one—to bring a large class of phenomena, seemingly the most opposed to the ordinary laws of nature, within the compass of those laws. In this attempt I am not aware of having violated, in any instance, the strict rules of inductive logic." Again: "To explain *sensation*, thought, &c., by corpuscular change in matter, is impossible: they are ultimate facts, and like all such, incomprehensible, or, rather, are to be known only in themselves."

After these explanations, Dr. Harrison strikes off boldly into the field.

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* An Essay towards a correct Theory of the Nervous System. By John P. Harrison, M.D., &c. &c. Philadelphia: Lea & Blanchard. 1844. 8vo. pp. 292.

In the course of eleven chapters, he impresses the reader with the profundity of his attainments in a department of study which a few only, in the moving multitude, have either the courage, the taste, or the requisite mental power, seriously to engage in. We may hazard the opinion, therefore, that this essay—from the character of the subject it treats—will not be extensively perused; but it will nevertheless produce a sensation, and give activity to elevated minds both here and in Europe. In short, it will stimulate into activity those who have the capacity and the industry to cope with this or any other theory of the nervous system. We shall watch with interest for the more elaborate reviews of Dr. Harrison's essay—feeling assured that the sparks elicited by his genius must necessarily produce a corresponding movement in some other minds.

Dr. Hayward's Outlines of Physiology.—Since treatises on the elements of this important science have been considerably multiplied of late, an acquaintance wishes us to call the attention of the public to the volume prepared by Geo. Hayward, M.D., of this city. He thinks no subsequently-written work, prepared for the same object, is any improvement upon that—nor, in fact, so good. We see no reason for altering our own views in regard to Dr. Hayward's undertaking, which have been heretofore expressed. It is an excellent digest of the science, admirably suited to the purpose for which it was intended. It is now in the fourth edition—the best of all commendation.

Ohio Lunatic Asylum.—The fifth annual report is before us, for copies of which we are indebted to the Superintendent, and to Dr. Bennett, of the Ohio Legislature. It is a plain, methodical, satisfactory document, with which the Legislature of the State, to whom it was addressed, must have been gratified. Although we passed a day at Columbus, the last season, it was not convenient to visit the Asylum, which is much regretted. Dr. Awl's reputation stands high in public estimation—and long may he live to benefit, by his experience and philanthropic disposition, the wretched, reason-bereft beings who are confided to his care. A synopsis of the report has been given in former numbers.

Maine Insane Hospital.—One of the first items of interest noticeable in this report, is the economy of the institution. The expenditures for eleven months past, were only $8,999 68. Next, the Medical Superintendent's report is most essential. Dr. Ray seems to have exerted himself to raise the Hospital where it was *not* under the administration of Dr. Knapp—the resigned, of remarkable memory. By a law of the State, the Hospital year is to end, in future, on the 30th of November. In eleven months, 82 patients were admitted. Within the same period, 31 recovered, 27 were improved, 17 were not improved, and 4 died. On the 31st of Dec. 1842, there were 65 inmates. Greatest number of patients at any time during the year, 72; average number, 65. That which takes the highest place in Dr Ray's report, regards criminal law, which is marked for republication in the Journal, whenever room can be spared for its introduction.

Medical Examinations in Connecticut.—An editorial article appeared in the New Haven Daily Herald, last week, on the subject of the medical schools in that city, which was so judicious and appropriate, as to claim the special notice of those interested in the progress of medical education. Of the address delivered by Dr. Welch, to the candidates for degrees, the Herald speaks in terms of unqualified praise, and intimates that it is to be published in a pamphlet. A valedictory was pronounced by Dr. Brown, distinguished for its chaste and classical character. The editor says, "we cannot but admire the professional zeal and public spirit which annually brings together so much talent and respectability in the board of examiners. It is no little sacrifice for six gentlemen, so highly distinguished in their profession, to leave their business and come from remote parts of the State, to attend to this official duty. The public can have no better surety than is afforded by the character of the board, for a rigid scrutiny of the qualifications of candidates for the responsible duties of the medical profession." The people of Connecticut do every thing well in regard to education. They allow no half-way measures in graduating classes in law, physic or divinity; the candidate cannot pass the ordeal unless he is fully qualified.

Geneva Medical College.—A prosperous lecture term has recently closed at this College—the class averaging from 150 to 180, says the Geneva Advertiser. The character of the institution is represented never to have stood higher. Dr. T. R. Spencer, one of the Faculty, seems to have been quite a favorite of the class. He is a gentleman of elevated attainments, who does not consider it a derogation of dignity to be courteous and obliging. The degree of M.D. was conferred upon 44 graduates, whose names and theses we are obliged, for want of room, to omit. The honorary degree of M.D. was conferred upon the following gentlemen:—Edson Carr, Daniel T. Jones, William Wallace.

Castleton Medical College.—The catalogue and circular of this institution has been received, containing also the names of all who were admitted to the degree of Doctor in Medicine, at the termination of the autumnal lectures—26 in number. The honorary degree was conferred on James Kenedy, N. Y.; Wm. Tibbits, N. Y.; Thomas Chadbourne, M.D., N. H.; Alden S. Sprague, M.D., N. Y. The spring course of lectures will commence on the last Thursday of February.—We have received from the Trustees of the College, with the request to publish, the following "copy of a resolution passed at a meeting of the Board of Trustees, convened Dec. 30th, 1843."

"*Whereas*, it has been made to appear to this Corporation by satisfactory testimony, that Prof. James McClintock has pursued a course of conduct inconsistent with his connection with this institution, therefore *Resolved*, that he be and he hereby is removed from the Professorships which he now holds, and all connection with this institution.

"I. Davey, *Secretary of the Trustees of Castleton Med. College.*"

Rush Medical College.—When asked where this institution is located, it is not strange that the question could not be readily answered. Schools of medicine are now so very numerous in the United States, that one needs to keep a catalogue of them in his pocket for reference. The charter of the Rush Medical College was granted by the Legislature of Illinois, in 1837; but it was not fully organized till last October. The present faculty was then appointed, and on the 4th of December a course of Lectures was opened. Daniel Brainard, M.D., has the chair of Anatomy and Surgery; J. V. Z. Blaney, M.D., that of Chemistry and Materia Medica; John McLean, M.D., Theory and Practice of Medicine; M. L. Knapp, M.D., Diseases of Women, Children and Obstetrics. Those who have the pleasure of an acquaintance with these gentlemen, must feel assured that whatever charge is committed to their care will be managed with discretion. The dignity of the profession will lose nothing in their keeping; and empiricism in medicine, it is hoped, will melt away, wherever the influence of the Rush Medical College is felt, like an early dew before the rising sun.

Chicago—and who that has the spirit of enterprise in him does not delight to hear the name of Chicago?—is the place where this new College is located. Its prospects are identified with the prosperity of the West. Dr. Brainard's introductory discourse, of seventeen octavo pages, on the *Institutions of Science*, now before us, is exceedingly creditable to him. "Professional character," says Dr. B., "is the property, too often the only property, of its possessor; on this he relies for support. When, therefore, we hear it unjustly assailed, either from malice or thoughtlessness, it is impossible not to conclude that the assailant is destitute of respect for the rights and property of his neighbor. That this is too often heard, all must admit, and it constitutes an evil of such magnitude, as to call for some general effort of the better portion of the profession to prevent it."

Medical School in Tennessee.—From the Knoxville Argus, intelligence is received of an intention on the part of the trustees of the University of Tennessee, to organize a medical department. In connection with the project, the name of Dr. Cross, of Lexington, Ky., is associated. Having the pleasure of a personal acquaintance with that gentleman, we can bear full testimony to the suavity of his manners, and to his eminent literary and scientific qualifications, which would give character to any institution to which he might be called. But why should the University of Transylvania allow the suggestion to go abroad, that Dr. Cross might resign his chair? If there is a spark of that ambition still remaining in Lexington, which has been eminently conspicuous for many prosperous years, the University will not allow such talent to be withdrawn.

Health in the Massachusetts State Prison.—The following synopsis of the annual report of the attending physician of the Massachusetts State Prison, has been extracted from the Boston Post.

"Appended to the report of the warden of the State Prison, is that of the physician. It is short, comprehensive, and characteristic of its distinguished author, Dr. Wm. J. Walker. The whole number of patients admitted during 1843, is 151: the number of days residence in the hospital is 2892; and 334 days' labor has been abated to invalids for a day, and 430 days light labor have been advised by him. There have been 2 deaths. By a table annexed to the report, it appears that the physician of the Prison has had under him 2961 convicts, and that during this time there have been 42 deaths. Upon this Dr. Walker makes a remark of too much importance to the people, and to doctors and apothecaries, to be hastily passed over :—

"By the annexed table it will be seen that the whole cost of drugs and medicines for the term of ten years, last past, is $273 08; and that the average annual mortality among the convicts is as one to seventy and five tenths. During the above term the physician has declined giving drugs to the convicts until fully satisfied, in the first place, that the applicant was sick. Secondly, that his malady was understood, and susceptible of cure, or of material relief. Thirdly, that the proposed drug was well adapted to benefit the patient, and not likely to leave any deleterious influence in his system.

"The result of this experimental inquiry is truly gratifying, as the mortality has diminished about one third; and I firmly believe that the same plan of treating diseases in the great human family would be highly beneficial to mankind, and tend to elevate the character of the medical profession."

Anomalous Eruptive Disease.—In the town of Lyme, Huron Co., Ohio, an eruptive disease has appeared, that is exciting considerable attention. Dr. Charles Smith, of that place, who has made himself familiar with its appearance and general character, gives the following account of it. We hope Dr. Smith will hereafter furnish us with a detailed scientific paper upon the subject.

"On several of the cases the eruption has been of the most confluent form, accompanied with swelling of the head and face, soreness of the throat and mouth, with hoarseness. In every case the pustules have begun to dry up in five or six days, and the swelling to subside, and all of them were personally exposed to the infection of the first case. There have been, up to the present time, fifteen cases, all of them convalescent, some of them well. On some the attack has been very severe; while on others it has been slight.

"The course of treatment has been generally to bleed and evacuate the stomach and bowels, in the forming stage; and then to keep the bowels relaxed during the complaint.

"Vaccination does not prevent or modify the disease; most of the subjects have been vaccinated. Nor does smallpox seem to prevent it. There have been two slight cases, who had the smallpox.

"There is no evidence, at the present time, of its being contagious, only by personal exposure. There have been no distinct features of the smallpox in these cases. In the distinct smallpox, the pustules fill with pus in eight or ten days, and in the confluent kind they do not fill until the eleventh or fourteenth day."

Dr. Dixon's Speculum.—Readers are requested to examine the claims of this new instrument, a description of which appears to-day. An eminent surgeon in Boston, who has looked into its construction, says it is an excellent affair.

Dr. Lee's Agency.—Those interested in the progress of medical literature, will be gratified with the progress a-head, as developed in Dr. Lee's advertisement in to-day's Journal. We shall more particularly advert to the subject of the Sydenham Society at another day.

"*Anatomical Mistake.*"—Mr. Editor,—I noticed in the Journal of the 31st, some strictures upon Dr. Atkinson's case of inguinal hernia. It is to be regretted that your correspondent has made so much of an affair which by every candid reader was probably considered a slip of the pen. The "anatomical mistake" was doubtless perceived by all the readers of the Journal, but did any one, with the exception of your correspondent, for a moment imagine that this resulted from the ignorance of Dr. A. concerning the parts of which he speaks. Had such been the case, I doubt if the friends of Mrs. W. would have had the pleasure of seeing her restored to health. I believe it has ever been conceded by practical surgeons, that a successful performance of the operation for inguinal hernia, was *prima facia* evidence of skill and science on the part of the operator. The writer of this article is well acquainted with Dr. A., and believes him to be a sensible, honest, and successful practitioner, incapable of fraud, or "reporting what he reads rather than what he sees." His communication was probably written very hastily, and if your correspondent had waited a reasonable time, or addressed a private note to Dr. A., which would have been the more generous course, the matter might undoudtedly have been satisfactorily explained. For one, Mr. Editor, I deprecate the censorious and captious spirit which some men manifest towards others in their own profession. There is already prejudice enough existing in the minds of the community against medical men, and they should be careful how they inadvertently or designedly expose the blunders of their brethren. Mistakes of a more serious character than the one under consideration sometimes occur. Perhaps you may recollect an instance, some years since, where a surgeon "damned himself to everlasting fame" by tapping a woman for dropsy, who in the sequel proved to be pregnant. Had Dr. A. committed an error of this kind, there would have been some call for censure—but as it is, *cui bono?* Justitia.

To Correspondents.—A communication, signed *Pindar*, has been received. If the author will allow us to attach his name to it, it will be inserted; those who may feel called upon to answer it, will then know whom to address. The writer, we trust, will not impute this unwillingness to give insertion to his article, to any want of respect towards himself as a professional gentleman, since his position in society is one of which any man might be proud. We cannot comprehend the precise object of the paper, nor discover what good is to be accomplished by its publication; nevertheless, with the writer's name, it will be admitted.—No. I. of Dr. Allen on Epidemic Erysipelatous Fever, and Phreno-Mesmerism No. IV., are on file for insertion. An account of a number of cases treated homœopathically has also been received.

Died,—At Columbus, Ohio, Dr. Double, of smallpox.—In Brookline, Mass., Dr. John C. Howard, 49.—In Boston, Henry G. Wiley, M.D.—In Portland, Me., Dr. Newell Smith, 60.—At Warehouse Point, Conn., Dr. William Daniels, 39.—At Hallowell, Me., Dr. Benjamin Page, 74—one of the original subscribers to this Journal, and an occasional contributor.—At Machias, Me., of apoplexy, Dr. Newell Wetherbee, also an original subscriber to this Journal.

Number of deaths in Boston for the week ending Feb. 3, 32.—Males, 13—Females, 19. Stillborn, 5.

Of consumption, 6—measles, 1—dropsy, 1—hæmorrhage, 1—worms, 1—scarlet fever, 2—lung fever, 3—dropsy on the brain, 2—suicide, 1—erysipelas, 1—hooping cough, 1—canker, 1—paralytic, 1—inflammation of the bowels, 1—old age, 2—dropsy on the chest, 1—debility, 1—infantile, 1—pleurisy fever, 1—typhus fever, 1—fits, 2.

Under 5 years, 11—between 5 and 20 years, 2—between 20 and 60 years, 12—over 60 years, 7.

Queen Elizabeth suffering from the Toothache.—There were found at Islington, concealed in the house of a catholic priest, three waxen images of the queen, and two of her chief counsellors, which it was said were intended to be operated upon in a diabolical manner for her destruction. Much at the same time Her Majesty was attacked with such grievous toothache, that nothing could mitigate the torture she endured, and she obtained no rest either by night or day. Some persons attributed these sufferings to the malign magic that had been employed against her. Her physicians held a consultation on the royal malady; and instead of devising a remedy for her relief, fell to disputing among themselves on the cause of her indisposition, and the medicines most advisable to use. The lords of the council then took the matter in hand, and decided on sending for an "outlandish physician, of the name of John Antony Fenatus," who was celebrated for curing this agonizing pain; but as it was a perilous thing to entrust the sacred person of a sovereign, so suspicious of plots against her life by poison as Elizabeth, to the discretion of a foreign practitioner, "who might possibly be a jew, or even a papist," they would not permit him to see Her Majesty, but required him to write his prescription.

Fenatus composed a long and elaborate Latin letter in reply, declaring in the first place his unworthiness to come after such great physicians, and then prescribing divers remedies, but with the intimation that, if the tooth were hollow, when all was said and done, it was best to have it drawn, though at the cost of some short pain. If, however, Her Majesty could not bring herself to submit to the use of chirurgical instruments (of which it seems he had heard something of her abhorrence), then he advised that the juice of *chelidonius major* might be put into the tooth, and so stopped with wax that none of it might touch the sound parts; which would so loosen the tooth, that in a short time it might be pulled out with the fingers; or the root of the said plant might be rubbed upon the tooth, which would produce the same effect; but concluded by declaring that drawing the tooth was, by all, esteemed the safest and best way.

The courage of the lion-hearted Elizabeth failed her on this occasion; and she expressed so much repugnance at the loss of her tooth, combined with terror of the pain that might attend the operation, that the eloquence of her whole cabinet could not prevail upon her to undergo it.

Aylmer, Bishop of London, who was present at this grave debate, then stood forth; and after assuring Her Majesty that the pain was less than she apprehended, told her, "that although he was an old man, and had not many teeth to spare, she should see a practical experiment of it on himself," and thereupon, bade the surgeon, who was in attendance, extract one of his teeth in Her Majesty's presence, which encouraged the queen to submit to the like operation.—*Miss Strickland's Lives of the Queens of England.*

Milk injected into the Veins.—M. Donné, in the course of the past summer, stated to the French Academy of Sciences, that having been struck with the analogy between the constitution of milk and that of blood, he had repeated the experiment of injecting the former fluid into the veins of various animals; and his experience, contrary to that of many former observers, went to prove that those animals (except, from some unascertained cause, the horse) not only supported the effect without injury, but the globules of milk served the purpose of those of chyle, and became eventually transformed into blood-globules.—*Gaz. des Hopitaux.*